

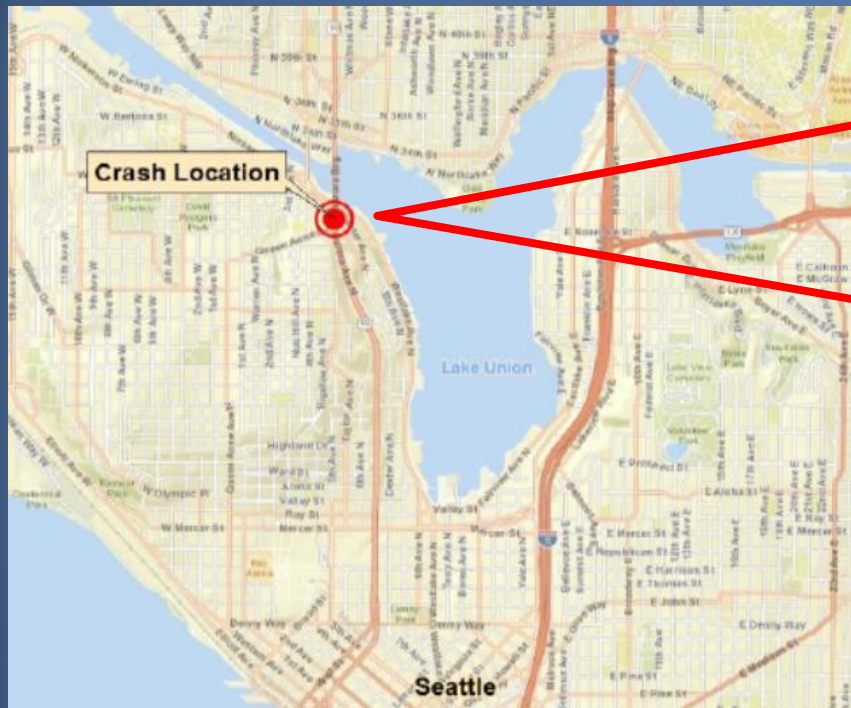


**National
Transportation
Safety Board**

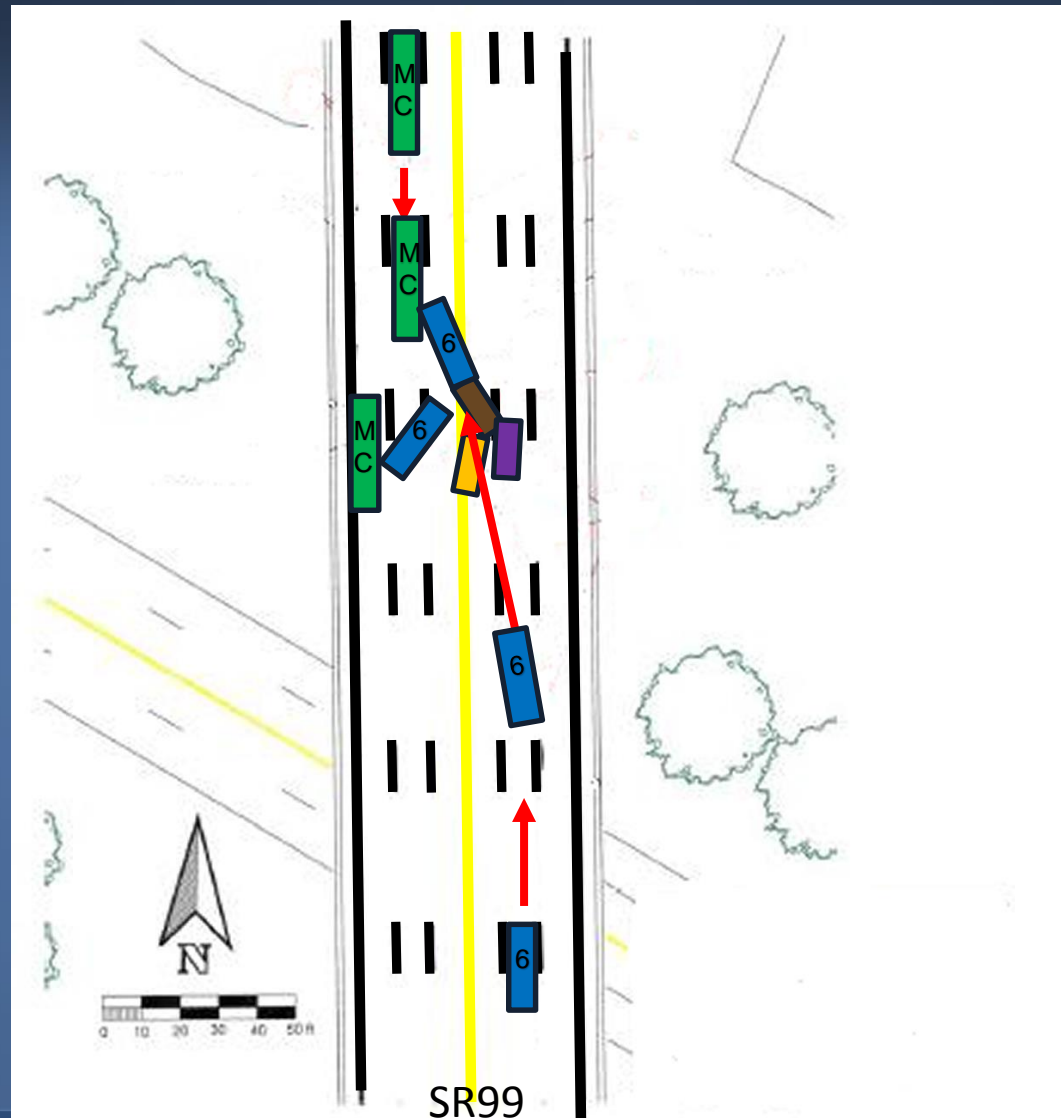
**Amphibious Passenger Vehicle (APV)
DUCK 6 Lane Crossover Collision
With Motorcoach
Seattle, Washington
September 24, 2015**

Pete Kotowski, Investigator-in-Charge

Crash Location



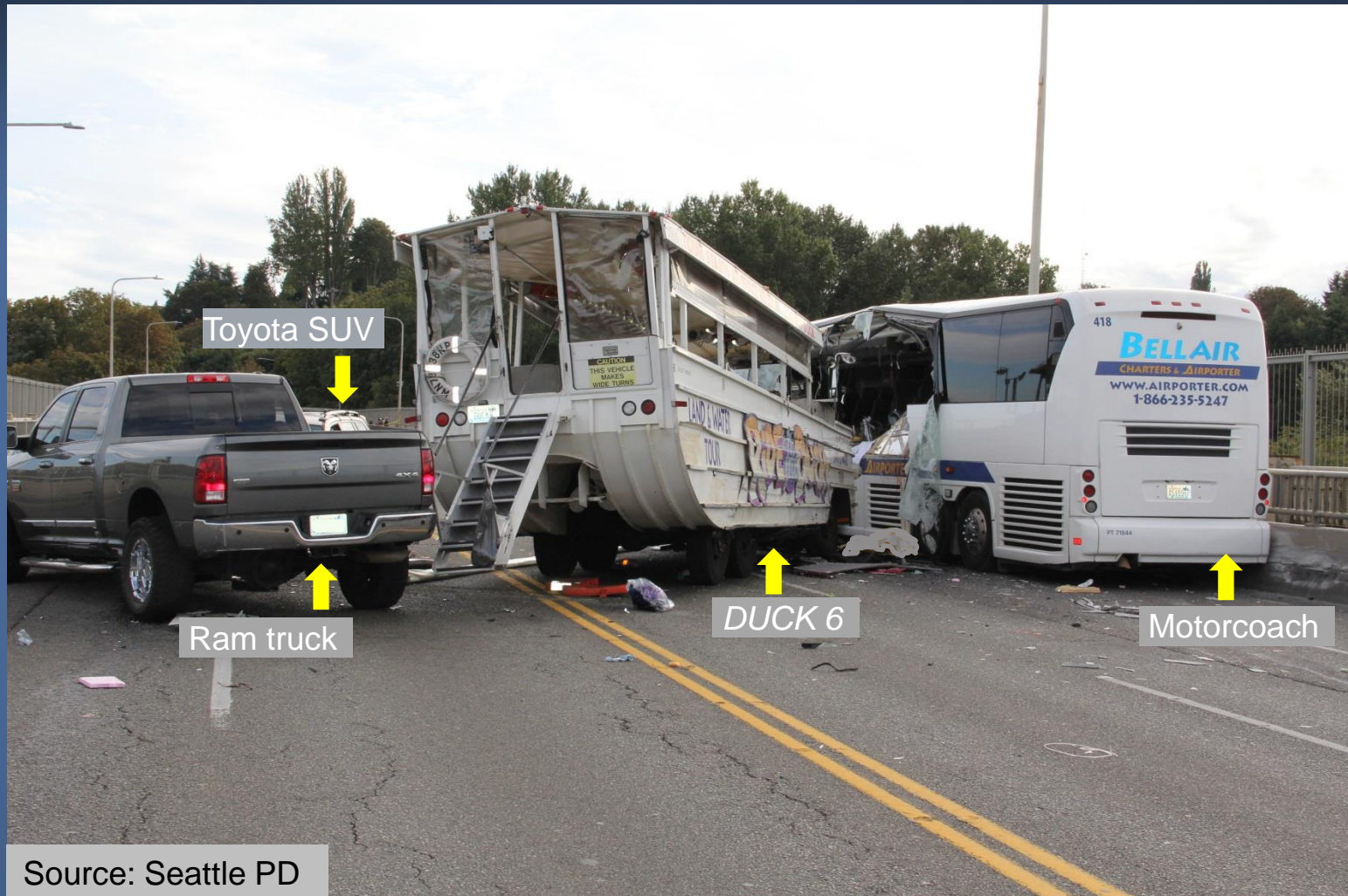
Crash Sequence



Scene



Scene



Motorcoach Video

- Motorcoach equipped with a Rosco dual-vision video-recording device
- Camera records forward-facing view
- Video shows trailing driver's view of lead motorcoach in the center lane
- *DUCK 6* visible at the left top of screen
- Movements of *DUCK 6* prior to impact

Motorcoach Video

Injuries

- 5 fatalities
- 69 passengers injured
 - 29 serious, 40 minor
 - 11 *DUCK* 6 passengers ejected
- *DUCK* 6 driver serious injuries
- Motorcoach driver minor injuries
- Other occupants not injured
- 91 total involved persons

On-Scene and Investigative Staff

- Earl Weener, Member-On-Scene
- Kristen Shea, Special Assistant
- Pete Kotowski, Investigator-In-Charge
- Steve Prouty, Highway Factors
- Dennis Collins, Human Performance
- Michael LaPonte, Motor Carrier
- Bob Squire, Reconstruction
- Ron Kaminski, Survival Factors

On-Scene and Investigative Staff

- Brian Bragonier, Vehicle Factors
- Jennifer Morrison, Vehicle Factors
- David Pereira, Vehicle Factors
- Adrienne Lamm, Materials
- Xiaohu Liu, PhD, Finite Element Analysis
- George Haralampopoulos, Recorders
- Dan Horak, PhD, Video Analysis
- Shane Lack, 3-D Scanning

On-Scene and Investigative Staff

- Nicholas Webster, MD, Medical Officer
- Max Green, TDA
- Michael Crook, TDA
- Michele Beckjord, Project Manager
- Keith Holloway, Media Relations
- Terry Williams, Media Relations
- Carl Perkins, Computer Services

Report Development Staff

- Michele Beckjord, Project Manager
- Gwynne O'Reagan, Report Editor
- Julie Perrot, Safety Recommendations
- Mike Brown, Safety Recommendations
- Capt. Jim Scheffer, Marine Safety
- Andrew Ehlers, Operator Research
- Eric Emery, PhD, Mapping Graphics
- Christy Spangler, Graphics

Parties

- Federal Motor Carrier Safety Administration
- National Highway Traffic Safety Administration
- US Coast Guard
- Seattle Police Department
- Washington Utilities and Transportation Commission
- Washington Department of Transportation
- Ride the Ducks International
- Ride the Ducks of Seattle

Safety Issue Areas

- Failure by unregistered vehicle manufacturer to properly remedy a safety defect under the recall process
- Lack of adequate oversight of APV maintenance and failure to conduct safety repairs as recommended

Safety Issue Areas

- Lack of adequate occupant protection in APVs used in commercial passenger tours
- Risk management in APV operations



National Transportation Safety Board